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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/383,150	08/25/99	SHYU	R 3576BP/S295

EXAMINER	
ABRAHAM, F	
ART UNIT	PAPER NUMBER
2826	#6

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/383,150	Shyu
Examiner	**Group Art Unit**
Fetsum Abraham	2826

☒ Responsive to communication(s) filed on *Jan 2, 1901*

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *1* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) *1-13* is/are pending in the applicat

Of the above, claim(s) *9-13* is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-8* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). *6*

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

FETSUM ABRAHAM
PRIMARY EXAMINER

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Claims Rejection

the election in Paper No. 5 has been acknowledged and the non elected claims 9-13 have been withdrawn from consideration.

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. **Claims 1-8, so far as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Raad in view of the prior art submitted by applicant in figure 1.**

Raad shows a fame composed of chips (103) having receiving section adjacent to both chips at the central portion and supplied with internal connection leads (111), and plurality of external terminals (12) attached to the chips for external connection, but omit to show how the external terminals are connected to the chips. However, figure 1 in the application shows that external connect terminals (13) are commonly connected with the chip through wires extended between the pads (110) on the chip and the external terminals. Therefore, it would have been obvious to one skilled in the art to use such a connection for all chips on a lead frame, since the method provides reliable wiring for IC chips..

Further, although the exact terms such as "windows" and "chip receiving windows" are not used by the prior art, it would have been obvious to one skilled in the art that the intention of the unclear terms are inherent to the structure because of structural similarity of the devices.

As for said master and slave ICs in claim 7 and the testing element in claim 8, the prior art does not discriminate such devices as the structure is applicable to any type of chips in the art. Please note that the action is based on the fact that the interconnect structure in the prior art as being applicable for any type of device that cab be formed in a IC chips including memory, testing elements, and any other known ICs.

Claims 1-8, so far as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Mostafazadeh et al in view of the prior art submitted by applicant in figure 1.

Mostafazadeh et al show a fame (110) composed of chips (130) having receiving section adjacent to both chips at the central portion and supplied with internal connection leads, and plurality of external terminals or leads (120) attached to the chips for external connection. Although the prior art omits to show bonding pads on the chips, the lead frame in figures 1c-1-1d3 clearly suggests the existence of the bonds on the IC chips for connecting leads (140) with the chips similar to any lead frame structure (see column 1, 10-20). But, to the alternative, figure 1 in the application shows that external connect terminals (13) are commonly connected with the chip through wires extended between the pads (110) on the chip and the external terminals. Therefore, it would have been obvious to one skilled in the art to use such a connection for all chips on a lead frame, since the method provides reliable wiring for IC chips, and is the most basic interconnect methods in lead frames.

Further, although the exact terms such as "windows" and "chip receiving windows" are not used by the prior art, it would have been obvious to one skilled in the art that the intention of the unclear terms are inherent to the structure because of structural similarity of the devices.

As for said master and slave ICs in claim 7 and the testing element in claim 8, the prior art does not discriminate such devices as the structure is applicable to any type of chips in the art. Please note that the action is based on the fact that the interconnect structure in the prior art as being applicable for any type of device that cab be formed in a IC chips including memory, testing elements, and any other known Ics.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Please refer to PN: 5,796,746. The circuit in the patent has a testing circuit on the frame.

Any inquiry concerning this communication should be directed to Fetsum Abraham at telephone number (703) 305-3793.

Fetsum Abraham

1/17/01